TABLE OF CONTENTS

1.	I NTROD A. B.	<u>Back</u>	groun	d Hi story	Page 1
11.	COMPL A. B.	<u>Intro</u>	ducti P's Pro Desci Standa	OPU 92-181 PHASE I DIRECTIVES on	Page 5 Page 6 Page 6 Page 7
		Intro Ihe Re 1. 2. 3.	ducti source Source Standa Analy opose Intro Standa Supply a. b. c. d.	OF THE COMPANY'S PROPOSED RESOURCE On Ce Evaluation Process Tiption Or of Review Sisand Findings Or Resource Plan Or of Review Sed Resources Introduction Or of Review Sed Resources Introduction Or of Review NYSEG System Purchase Newington Unit Purchase Fitchburg Unit 7 Sale Nod-Si de Management Resources Introduction Residential Electric Space Heat Program Introduction Residential Electric Space	Page 9 Page 9 Page 9 Page 12 Page 14 Page 17 Page 17 Page 18 Page 18 Page 19 Page 21 Page 21 Page 23 Page 24 Page 24 Page 24 Page 24 Page 24 Page 24 Page 29 Page 29 Page 30 Page 31 Page 33 Page 33 Page 33
			e.	ii. <u>Analysis and Findings</u>	Page 35

				i .	Desc	<u>cription</u> F	age 38
					(A)	<u>Program Desi gn</u> F	age 38
					(B)	Proposed 1994 M&E Activities P	age 39
				ii.	<u>Anal</u>	ysis and Findings	Page 41
			f.			<u>nsi ve Effi ci ency Program</u> I	
				i .		<u>cription</u> l	_
					(A)	<u>Program Desi gn</u> l	_
					(B)	Proposed 1994 M&E Activities . I	
						ysis and Findings	_
		_	g.			of the Proposed DSM Resources I	_
		5.	Summa	ary of	the (Company's Proposed Resource Plat	age 48
IV.	DHVCE	LVDEC		CONTRA	\ CTL NO	IC D	2000 10
IV.	A.					<u>IG</u>	_
	А. В.						
	C.						_
	O .	COILL	actr	ιρρι Οντ	<u> </u>		age w
٧.	OTHER	LSSUES					Page 52
	A.					<u> Costs</u>	
		1.				<u>posal</u>	
		2.				<u>i ndi ngs</u>	
		B.				<u>emaki ng Issues</u>	
							-
VI.	<u>ORDER</u>						age 58

I. INTRODUCTION

A. <u>Background</u>

On November 15, 1993, Fi tchburg Gas and Electric Light Company¹ ("Fi tchburg" or "Company") submitted its Integrated Resource Management ("IRM") Phase III filing for review by the Department of Public Utilities ("Department").² Pursuant to a Comprehensive Settlement Agreement ("Settlement") approved by the Department in Phase I of the Company's IRM proceeding, the Company is sued four requests for proposals ("RFPs"): a supply-side, energy-only RFP ("supply-side RFP"); a complementary demand-side management ("DSM") RFP; ³ and two DSM implementation RFPs for residential programs.⁴

Fi tchburg Gas and Electric Light Company serves approximately 25,000 electric customers in the towns of Fi tchburg, Lunenburg, Townsend and Ashby, Massachusetts. On April 28, 1992, Fi tchburg merged with UNITIL Corporation. UNITIL provides retailelectrical service in New Hampshire through Concord Electric Company and Exeter & Hampton Electric Company, and wholesale service through UNITIL Power Corporation.

Ihe IM process involves a four phase review by the Department of the procedures by which additional energy resources are planned, solicited, and procured by an electric company. See 220 C.M.R. \$\mathbb{S} 10.00 \text{ et seq.} In Phase I, the Department reviews the demand forecast and resource inventory of an electric company and makes a determination of resource need. In this same phase, the Department reviews the company's all-resource solicitation RFPs. Phase II comprises the company's resource solicitation process, in which the company is sues the Department-approved RFPs and determines a proposed award group. Phase III comprises the Department's review of an electric company's resource plan and proposed award group. Phase IV comprises the Department's procedures for approving contracts in the award group.

Pursuant to the terms of the Settlement, the Complementary DSM RFP would solicit proposals for DSM services that would complement the services provided by the Company's ongoing DSM programs.

Pursuant to the terms of the Settlement, the DSM RFPs would solic it proposals for "turnkey" i mplementation of the Company's programs.

See Fitchburg Gas and Electric Light Company, D.P.U. 92-181 (1993) ("D.P.U. 92-181"). In addition, the Settlement required the Company to continue its existing DSM programs through the RFP solicitation, and allowed the Company to include its existing DSM programs in its Phase III resource plan. The Settlemental so required the Company to develop a resource plan using an integrated system resource evaluation process.

In its Phase III filing, the Company identified several supply-side and demand-side resources resulting from its NEPsolicitations, and provided a description of the process used by the Company to integrate the planning and procurement of supply-side and demand-side resource options. Additionally, in this proceeding the Company presented information concerning its proposed methods for recovering costs associated with the supply-side and demand-side resources, and requested Phase IV review and approval of DSM contracts for residential programs. The Company also requested that the Department consider permitting the Company to recover certain administrative costs associated with the procurement of supply-side resources through the fuel charge. Finally, in its Phase III filing the Company requested an expedited approval of its proposed DSM resources in order to include these programs in its 1994 Conservation Charge ("CC") which was scheduled to take effection February 1, 1994.6

The Settlement stated that, in addition to the residential programs to be solicited through the DSM RFPs, the Company was required to propose utility-sponsored programs for implementation during 1994 and 1995. D.P.U. 92-181, at 10-11.

On December 31, 1993, the Department di rected the Company to conti nue i ts exi sti ng C&LM programs, and to submit a CC filing for the commercial and industrial sectors based on those programs proposed in the Phase III Resource Plan, subject to revision pending the outcome of Phase IV of the Company's IRM proceeding. The

This Order addresses is sues raised by the Company's November 15, 1994 filing. In Section II, the Department addresses the Company's compliance with directives of the Department's Order in Phase I, D.P.U. 92-181. In Section III, the Department will review (1) the process by which the Company developed its proposed resource plan and (2) the proposed resource plan itself, in particular those resources that represent a change from the resource inventory identified by the Company in Phase I of this IRM proceeding. In Section IV, the Department will address the Phase IV resource contracting and cost recovery is sues raised by the Company's filing. In Section V, the Department will address other is sues, including the Company's request that the Department consider approval of transferring IRM administrative costs from its base rates to its fuel charge.

B. <u>Procedural Hi story</u>

On August 3, 1992, the Company submitted its draft initial filing for review by the Energy Facilities Siting Council ("Siting Council") and the Department in Phase I of the Company's IRM proceeding. The Office of the Attorney General, Boston Edison

Department stated that, at the conclusi on of Phase IV of the Company's IRM proceeding, it would determine whether revision to the Company's CC tariff to include rates for residential sectors would be appropriate. On January 21, 1994, the Company submitted a CC filing in accordance with the Department's directive, and on February 4, 1994, the Department approved the Company's January 21, 1994 CC filing, subject to revision. See Fitchburg Gas and Electric Light Company, D.P.U. 94-5A-CC (1994).

On September 1, 1992, pursuant to reorgani zati on legi slati on filed by the Governor and approved by the Legi slature, the Si ting Council was merged into the Department, and the Energy Facilities Si ting Board ("Si ting Board") was created. Acts of 1992, c. 141 ("Reorgani zati on Act"). Pursuant to the Reorgani zati on Act, § 46, all petitions, hearings, and other proceedings brought before and begun by the Si ting Council prior to the effective date of the Reorgani zation Act, shall be completed by

Company, Commonwealth Electric Company ("ComElectric") and Cambridge Electric Light Company, Western Massachusetts Electric Company, Coalition of Non-Utility Generators, and New England Cogeneration Association, sought and were allowed to participate as parties in the proceedings. Massachusetts Electric Company was allowed to participate as an interested person. On January 25, 1993, the Company filed the Settlement with the Department, and on March 10, 1993, the Department approved the Settlement.

The supply-side RFP was is sued on March 19, 1993 in conjunction with along term capacity RFP is sued by UNITIL Power Corp ("UPC"). The DSM RFPs were is sued on March 31, 1993. Responses to each of these solicitations were requested by June 15, 1993.

After due noti ce to the parti es, the Department conducted a preheari ng conference on

ei ther the Department or the Si ti ng Board. Effecti ve December 18, 1992, the Si ti ng Counci I's IRM regulations, 980 C.M.R. §§ 12.00 <u>et. seq.</u>, were merged i nto the Department's IRM regulations, 220 C.M.R. §§ 10.00 <u>et. seq.</u> §<u>ee</u> D.P.U. 92-191 (1992).

On January 11, 1993, the Department appointed Settlement Intervention Staff.

On November 6, 1992, the Company submitted an Offer of Partial Settlement ("Partial Settlement") to the Department. On December 24, 1992, the Department stated that it could not accept the Partial Settlement, as filed.

The Settlement had been amended on February 16, 1993, February 26, 1993, and March 5, 1993.

On March 5, 1993, the Company requested a wai ver of the LRM regulations requirement of a solicitation period of between 90 and 120 days for the supply-side energy-only RFP. In approving the Settlement, the Department granted the Company's request for a wai ver pursuant to 220 C.M.R. § 10.07(5).

The Settlement provided that time periods for evaluation and selection of bids for the DSM RFPs would be parallel to the time frames for the supply-side energy-only RFP.

the Company's Phase III petition on December 28, 1993. Pursuant to the evidentiary schedule established at the prehearing conference, the Department conducted evidentiary hearings on January 4 and January 6, 1994. The Company presented three witnesses in support of its filing: George R. Gantz, vice-president of regulatory services for UNITIL Service Corporation; Paul Weiss, director of resource management for UNITIL Service Corporation; and David F. Russell, director of regulatory services for UNITIL Service Corporation. The evidentiary record in this proceeding consists of twelve exhibits marked by the Company, 92 exhibits marked by the Department, and the responses to 17 Record Requests is saued by the Department. Briefs were not requested by the Hearing Officer. To the conference of the Department of the Popartment of the Hearing Officer.

II. COMPLIANCE WITH DPU 92-181 PHASE I DIRECTIVES

A. Introduction

In D.P.U. 92-181, at 13-23, the Department i denti fi ed two i ssues that would be addressed in Phase III of the Company's IRM proceedings: (1) the project ranking system included in the RFPs i ssued by the Company in Phase II; and (2) the monitoring and evaluation ("M&E") plans to be submitted by the Company for the DSM programs proposed as part of its Phase III resource plan.

The Settlement submitted to the Department in D.P.U. 92-181 included draft versions of the Company's supply- and demand-side RFPs. In an Amendment to the Settlement, Fitchburg stated that each of the RFPs to be is sued in Phase II of the IM proceeding would be in the form identified in the Settlement, except that each RFP would be amended to

On January 26, 1994, the Company submitted a Memorandum requesting certain findings by the Department.

include a ranking system for use in the evaluation of resource proposals. In approving the Settlement as amended, the Department stated that we expect "that the Company's ranking system and revised RFPs will comply with ... [the IRM] regulations." D.P.U. 92-181, at 16.

Wi th regard to M&E plans for the new residential programs, for which service providers were to be solicited through the DSM RFPs, the Company was directed to submit plans that would identify, at a minimum, "(1) the plans for verifying that the DSM measures are properly installed, (2) the party that will conduct the impact evaluation and the types of impact evaluation methods to be used, and (3) the process evaluation plans." Id. at 20-21. For existing DSM programs, the Company was directed to submit M&E plans that would comply with Department precedent regarding DSM process and impact evaluations. Id. at 21.

In this Section of the Order, the Department addresses whether the ranking systems included in the RFPs do in fact comply with the LRM regulations. The Department addresses, on a program-by-program basis in Section III.C.4, below, whether the M&E plans submitted for each DSM program satisfy the D.P.U. 92-181 directives.

B. <u>The RFP's Project Ranking Systems</u>

1. <u>Description</u>

As stated in Section I.A, above, the Company is sued one supply-side and three demand-side RFPs in Phase II of its IRM proceeding. The supply-side and the demand-side RFPs used the same two selection criteria categories, value criteria and non-price criteria, and assigned the same scoring weights to each category. The value criteria contained a

maxi mum of 75 points, divided into price (60 points) and operating and quality characteristics (15 points) (FGE-1, at 1-6, 7). Within the operating and quality characteristics sub-category, the supply-side RFP awarded points for (1) interruptibility and dispatchability, (2) voltage control, and (3) maintenance planning. Within the operating and quality characteristics sub-category, the demand-side RFPs awarded points for (1) savings verification plans, (2) measure comprehensiveness, and (3) quality of savings (id.).

The non-pri cecri teri a category contained a maximum of 25 points. Within this category, the supply-side RFP awarded points for (1) project status, (2) unit diversity, and (3) other planning guidelines, and the demand-side RFPs awarded points for (1) financial capabilities, (2) organizational support, (3) ESCo experience, (4) comprehensiveness of services, (5) warranty provisions, (6) energy conservation measures, and (7) implementation plan (id.). A summary of the ranking system for the supply-side RFP is contained in Table 1 attached to this Order. A summary of the ranking system for the demand-side RFPs is contained in Table 2 attached to this Order.

The Company stated that the RFPs contained sufficient descriptions of the ranking system criteria to allow bidders to understand the criteria to be applied to each proposal (Ir. 1, at 67-84). The Company testified that, in particular, the RFPs contained specific information regarding the Company's resource planning guidelines (<u>i.d.</u> at 74-76).

2. Standard of Review

The IRM regulations require that an RFP include a "ranking system to evaluate project proposals on the basis of each proposal's ability to provide reliable electrical service at the lowest cost to society." 220 C.M.R. § 10.03(10)(d)(1). The regulations state that

[t] he ranking system shall incorporate all of the selection criteria that will be used to determine the relative values of project proposals. The ranking system shall apply relative weights to the major categories of criteria (e.g., price, the quality of output or savings, project feasibility) in order to identify the relative importance of these categories in selecting resources. The ranking system shall specify, in qualitative terms, how the criteria shall be applied to specific project proposals. \$ 10.03(10)(d)(2).

The regulations further require that, if a company is suesseparate RFPs for supply-side and demand-side resources, these resources "shall be evaluated using the same categories of selection criteriawith the same relative weights The ranking systems may use different subscoring systems within each category." 220 C.M.R. § 10.03(10)(b)(2).

3. <u>Analysis and Findings</u>

This Section of the Order addresses whether the RFPs is saued by the Company in Phase II of its IRM proceeding satisfy the requirements for RFPs set for thin the IRM regulations. The Department finds that the ranking systems included in the RFPs incorporated all of the selection criteria that were used by the Company to determine the relative values of project proposals. In addition, the Department finds that the RFPs ranking criteria categories and subcategories appropriately evaluated (1) the quality and timing of each proposal's output or savings; (2) each proposal's feasibility; (3) the fuel diversity benefits provided by each proposal, as required in the IRM regulations

The Department further fi nds that the RFPs contained sufficient information to allow bidders to understand the manner in which the evaluation criteria would be applied to their project proposals. Finally, the Department finds that the Company has satisfied the LRM regulations' requirement that the ranking systems of supply-side and demand-side RFPs

evaluate project proposals using the same categories of selection criteria with the same relative weights.

Based on the above analysis, the Department finds that the Company has satisfied the requirements set forth in the LRM regulations regarding RFP selection criteria.

III. PHASE III REVIEW OF THE COMPANY'S PROPOSED RESOURCE PLAN

A. Introduction

The objective of the Department's review in LMM Phase III proceedings is to ensure that a company's proposed resource plan contains the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. 220 C.M.R. § 10.05. In this Order, the Department's Phase III review will be presented in two stages. First, the Department reviews the Company's resource evaluation process to determine whether it is consistent with the requirements set forth in the LMM regulations, and is thus likely to result in a mix of resources that is consistent with the stated objective. Second, the Department reviews the resources included in the Company's proposed resource plan, in particular those proposed resources representing a change from the resource inventory identified by the Company in Phase I of this LRM proceeding.

B. The Resource Evaluation Process

1. <u>Description</u>

The Company stated that its resource evaluation process was intended to ensure that the resources selected through the process reflect an optimal combination of the available supply- and demand-side resource options (Exh. FGE-1, at 4-2). As stated in Section I.A, above, the Company is sued four RFPs during Phase II of its IRM process. The Company

stated that 29 proposals were submitted in response to the supply-side RFP (i.d. at 2-1). Regarding the DSM RFPs, the Company stated that (1) three proposals were submitted in response to the Residential Electric Space Heat ("RESH") RFP, (2) two proposals were submitted in response to the Residential Lighting Catalog ("RLC") RFP, 15 and (3) no proposals were submitted in response to the Complimentary RFP (i.d. at 3-1). In addition, consistent with the Settlement approved by the Department in D.P.U. 92-181, the Company proposed to continue implementation of its three existing DSM programs that which provide energy efficiency services to commercial and industrial ("C&I") customers (i.d. at 3-32).

the Supply- and demand-si de resource opti ons separately to develop "short li sts" of each resource type to be further consi dered in the integration and optimization stage of the evaluation process (i.d. at 42). The Company stated that its review of supply-si de resource options proceeded in the following manner. First, it screened each of the proposals submitted in response to the supply-si de RFP to determine whether each proposal satisfied the RFP's threshold requirement that no proposal increase the Company's projected system production costs (i.d. at 2-2). The Company determined that five of the supply-side proposals satisfied this requirement (i.d.). Second, the Company ranked these five proposals

The Company's supply-si de RFP was i ssuedjointly with UPC. Of the 29 proposals indicated here, six responded specifically to Fitchburg's RFP (Exh. FGE-1, at 2-1).

The Company's demand-si de RFPs were i ssuedjointly with UNITIL's affiliated retail companies in New Hampshire. The proposals indicated here were submitted to provide DSM services in Fitchburg's service territory (Exh. FGE-1, at 3-1).

The screening involved a comparison of a proposal's bidprice with the Company's avoided costs (Exh. FGE-1, at 4-1).

using the ranking system contained in the RFP. The Company stated that, based on the results of this in tial ranking, all five supply-side proposals were advanced to the integration and optimization stage of its review process (i.d. at 2-3).

The Company i ndi cated that i ts review of demand-side resource options proceeded in a similar manner. First, it screened each of the proposal submitted in response to the DSM RFPs to determine whether each proposal satisfied the relevant RFP threshold requirements. (i.d. at 3-4). Second, each proposal was subject to an in-depth review of its program delivery, pricing and savings assumptions to ensure that the assumptions were appropriate. Finally, the Company ranked the proposal susing the ranking criteria contained in the RFP. Based on the results of this initial ranking, the Company selected one service provider for each of the residential programs (i.d. at 3-6).

The Company stated that, as a first step in the integration and optimization process, it established a 'base case' resource portfolio that included all of the proposed DSM programs (i.d. at 4-2). The proposed DSM programs included the new residential programs, for which service providers were identified through the DSM RFPs, and the Company's existing C&I programs. The Company then tested the cost-effectiveness of each DSM program by removing individual programs from its resource portfolio and determining whether the removal of the program would increase or decrease the Company's projected system production costs (i.d.). Based on this analysis, the Company determined that the inclusion of

Proposals submitted in response to the DSM RFPs were required to include (1) a savings verification plan, (2) a program implementation plan and (3) documentation of organizational and financial support (Exh. FGE-3; Exh. FGE-4).

all of the DSM programs in its resource portfolio would be cost-effective for ratepayers (<u>i.d.</u>; Exh. DPU-24).

As a final step in the integration and optimization process, the Company tested the cost-effectiveness of various combinations of the five supply-side proposals in its resource portfolio. For each scenario, the Company determined whether the inclusion of the supply-side proposals would increase or decrease the Company's projected system production costs (Exh. FGE-1, at 4-2). The Company stated that, based on this analysis, and subsequent negotiations with the potential resource providers, it identified a mix of new supply- and demands de resources that would result in reliable, least-cost electrical service to its ratepayers (id.; RR-DPU-1).

2. Standard of Review

The IM regulations set out a six-step Phase II process by which electric companies must evaluate, modify, and select resources identified through competitive solicitations in the selection of award group proposals that would be included in a company's resource plan. 20 C.M.R. § 10.04(3). First, a company must screen all proposals to ensure that they satisfy the threshold requirements identified in the RFP(s). Id. Second, a company must verify that all representations made by the project developers in their bid responses are accurate, achievable and reasonable. Id. Third, a company must apply the ranking system included in the approved RFP(s) to determine the "initial ranking" of project proposals. Id. Fourth, a company may revise the initial ranking if it can demonstrate that the "improved ranking" is more likely than the initial ranking to result in a reliable supply of electrical

servi ce at the Lowest total cost to soci ety. ¹⁸ <u>I.d.</u> In D.P.U. 89-239, at 29 (1990), the Department indicated that this optimization phase was included "to allow electric companies to account for interactive effects, redundancy in C&LM programs, and drastic changes in fuel prices or other relevant factors that changed since the issuance of the RFP." The Department also determined that projects ultimately must be analyzed in the context of an electric company's total resource portfoliorather than in isolation. ¹⁹ <u>I.d.</u> at 34. Once the improved ranking is identified, the LMM regulations prescribe, as a fifth stage, that a company shall negotiate with all of the best projects from the improved ranking in order to allow the members of that "negotiating group" the opportunity to improve their project proposals. <u>I.d.</u> Proposed price and non-price factors shall be revised through negotiations only if the final resource plan would be improved. Finally, a company shall determine a proposed award group to fill any resource need as identified by the Department, or consistent with the quantity of energy sought in any energy-only solicitation approved by the Department. 20 C.M.R. § 10.04(3)(f).

In Phase III of an electric company's IRM proceeding, the Department shall determine whether a company's Phase II resource selection processis consistent with the IRM regulations. The IRM regulations permit the Department to approve the company's

The LRM regulations specify that just if it cation for selecting a mix of resources that deviates from that of the initial ranking shall be based on the reasons identified in the RFP and pursuant to 220 C.M.R. § 10.03(10)(d)(9), and shall be subject to Department review in Phase III.

The LMM regulations state than an electric company's methodology for integrating all types of resources shall be clearly articulated in the RFP(s) and shall be subject to Department review in Phase I. 220 C.M.R. § 10.03(10)(b)(1).

proposed resource plan if the plan is found to comply with 220 C.M.R. § 10.00 et seq. 220 C.M.R. § 10.05(3)(b). Therefore, the Department begins its Phase III review by addressing the process by which the Company determined the projects representing additions and deletions to its resource inventory. ²⁰

3. Analysis and Findings

This Section of the Order addresses whether the Company appropriately (1) applied the threshold criterial contained in the NFPs, (2) verified the representations made in the remaining bilds for accuracy, achievability, and reasonableness, and (3) applied the ranking criterial contained in the bilds to determine an initial ranking. This section also addresses whether the Company appropriately (1) integrated the supply-side and demand-side resources and optimized the proposed resources such that the result (i.e., the improved ranking) is more likely than the initial ranking to result in a reliable supply of electrical service at the lowest total cost to society, and (2) conducted negotiations with those who proposed the best projects in the improved ranking and allowed each developer within the negotiating group to revise its project proposal in order to improve the final resource plan.

The record indicates that the Company applied its threshold criteria for supply-side proposals (i.e., that proposals reduce Fitchburg's production costs), consistent with the terms of the Settlement as approved by the Department, to determine which proposals to include in the initial ranking of supply-side resources. The recordalso indicates that Fitchburg verified

A company's resource plan is comprised of the Company's resource inventory, as identified in Phase I of an IRM proceeding, and any proposed resource additions or deletions. 220 C.M.R. § 10.05(2)(b).

the representations made by bidders and applied the ranking criteria to eligible proposals according to the terms of the Settlement. See Exh. DPU-81, at 5. The Department finds that the Company fully complied with the LMM regulations as they pertain to the screening, verification, and initial ranking of supply-side resource proposals. Therefore, the Department approves the process by which the Company identified the initial ranking of supply-side resource proposals.

In identifying program providers for the RESH and RLC programs through the DSM RFPs, the recordindicates that the Company applied the threshold criteria as stated in the RFPs, verified the representations made in the proposals, and ranked the remaining proposals according to the criteria described in the RFPs. The Department finds that the Company fully complied with the requirements of the LBM regulations regarding the screening, verification and initial ranking of demand-side resource proposals as resulted from the Company's DSM RFPs. Therefore, the Department approves the process by which the Company identified the initial ranking of demand-side resource proposals.

The Settlement approved by the Department in Phase I of this IRM proceeding provided that the Company would is sue its supply-side and demand-side RFPs at the same time, and that responses to the RFPs would be screened and evaluated using an integrated evaluation process (Exh. DPU-81, at 5). The record in this proceeding indicates that Fitchburg did evaluate supply- and demand-side resource proposals in an integrated manner by testing alternative combinations of resources in its production cost simulation model. This optimization process evaluated the cost effectiveness of resources that were identified through the Company's RFPs, and several demand-side programs that the Company developed

outsi de of competitive solicitations. Based on a review of these processes, the Department finds that the Company has complied with the IRM regulations as they pertain to the integration and optimization of proposed resources.²¹

As a result of the Company's negotiation process, improved contract terms with resource providers were obtained. The record indicates that the Company included in the negotiation group all of the best projects from the improved ranking, and allowed each developer within the negotiating group to revise its project proposal in order to improve the final resource plan (Exh. FGE-1, at 2-6). The Department finds that the Company fully complied with the IMM regulations as they pertain to the negotiation with resource providers. Therefore, the Department approves the process by which the Company negotiated with potential providers of new resources.

Accordingly, for the purposes of this proceeding, the Department approves the Company's resource evaluation process as consistent with the development of an integrated,

Application of the Company's optimization process resulted in an improved ranking that did not vary from the initial ranking identified by the Company. The Department notes that the Company, within its optimization process, investigated the total system costs associated with reduction or elimination of the proposed DSM programs, but did not do a similar analysis to evaluate the cost-effectiveness of expanded DSM program implementation. The Company stated that it did not expand its DSM program implementation because of concerns regarding bill impacts. The Department observes that, because, pursuant to the Settlement, the Company had no need for additional resources, the Company appropriately considered bill impacts when evaluating resource scenarios. See Commonwealth Electric Company/Cambridge Electric Light Company, D.P.U. 91-234-A at 15-17 (1993). However, in future IRM proceedings the Department expects the Company to investigate the impacts on system optimization, as well as the short-term and long-term bill impacts, associated with the expansion of DSM program implementation.

least-cost resource plan.

C. <u>The Proposed Resource Plan</u>

1. Introduction

In this Section of the Order, the Department reviews the Company's proposed resource plan, and in particular those resources that have been submitted for approval which represent a change from the resource inventory identified by the Company in Phase I of this IMProceeding. In addition to new resources that were identified through competitive solicitations, the Company's proposed resource plan includes DSM programs that were not identified through a competitive RFP. The Company has also proposed to sell a portion of the output of one of its existing supply-side resources.

2. Standard of Review

Consistent with the objectives of a Phase III review as set forth above, the Company's proposed supply-side resource additions and deletions will be approved if found to be consistent with a resource plan that contains the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society.

The Department's Phase III review of a proposed resource plan may address (1) new resources that have been identified through a competitive solicitation is sued pursuant to a Department order in Phase I of an IM proceeding, or (2) new resources that were identified as resource options in a company's Phase IIM filing, but not tested in a competitive solicitation. When the Department has, in the course of its Phase III review, addressed and approved a company's resource selection process, new resources that a company identifies as resulting from that process warrant I imited review in order to determine (1) if they are, in

fact, the legitimate result of that process and (2) if they are otherwise consistent with a least-cost resource plan. New resources presented to the Department in a company's Phase III filing that were not tested in a competitive solicitation approved by the Department in a Phase IIM order are specifically evaluated to determine if they would be consistent with a mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. 2

3. Supply-Si de Resources

a. <u>Introduction</u>

As a result of its RFP and resource selection process which was approved by the Department in Phase I of D.P.U. 92-181, the Company developed a supply-side award group comprised of the following resources: (1) an option to purchase short-term energy from the Comelectric system between 1994 and 1998; (2) a capacity and energy purchase of five to fifteen megawatts ("MW") from the New York State Electric & Gas ("NYSEG") system between 1998 and 2008; and (3) a capacity and energy purchase from the Newington unit, owned by Northeast Utilities ("NU"), between 1998 and 2008 (Exh. FGE-1 at 2-8). In addition, the Company proposed a sale of a portion of the output of Fitchburg Unit 7.

Fi tchburg stated that, based on the results of the opti mi zati on process descri bed

If an electric company seeks approval of a new resource that has not been presented to the Department in its Phase I IRM filing and is not the consequence of a competitive solicitation approved by the Department in a Phase I IRM order, the company must demonstrate that (1) the acquisition of that resource could not have occurred through the IRM solicitation structure and (2) that the acquisition of that resource is in the best interest of ratepayers. IRM Rulemaking, D.P.U. 89-239, at 47-48 (1990).

above, it is dentified two distinct timeframes during which the implementation of new supply-side resources should occur (i.d. at 2-4). The Company testified that, as a consequence of its assessment of the anticipated energy and capacity markets, it had projected that there would be abundant generation available in New England between 1994 and 1998 "as a result of significant excesses on most of the utility systems" (Ir. 1, at 54). The Company asserted that, during this time period, a least-cost supply of electricity could be achieved by participating in the short-term energy markets and that, therefore, it would not enter into firm supply commitments that would require capacity related payments during the 1994-1998 time period (i.d. at 54-55).

The Company further stated that, for the years 1998 and beyond, "most of the utilities in the area are forecasting a tightening of the supply-and-demand situation" (i.d. at 55). Thus, the Company concluded that, for this time period, the least-cost option would be for it to commit to some "very, very low-cost utility generation" that it had identified through the supply-side RFP, which it asserted may not be available in the future years (i.d.).

b. <u>ComElectri c System Purchase</u>

The Company stated that the proposal submitted by ComElectric would provide the Company with the option to purchase short-term energy on a monthly basis, from November 1, 1994 through October 31, 1998 (Ir. 1, at 57, Exh. FGE-1, at 2-8). The Company testified that, under this option, it would have the flexibility to purchase up to 20 MW of the ComElectric system energy in any month that ComElectric's energy price is less than the cost of other alternatives available to the Company (i.d. at 2-8). If the Company could arrange for lower cost energy, it could arrange to make such energy purchases without

incurring any obligation to actually purchase energy from ComElectric (i.d. at 2-4). The Department finds that this purchase is consistent with the RFP is sued pursuant to the Settlement approved by the Department in D.P.U. 92-181, is the result of the resource evaluation process approved by the Department in Section III. Babove, and is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the Lowest cost to society. Therefore, the Department approves the ComElectric System Purchase as part of the Company's Phase III resource plan.

c. <u>NYSEG System Purchase</u>

The Company stated that the purchase of capacity and energy from NYSEG would provide a flexible entitlement of 5 to 15 MW (in 5 MW blocks) to NYSEG's low-cost, coal-based energy from November 1, 1998 through October 31, 2008 (Exh. FGE-1, at 2-8, 9, 10). The proposed contract contains fixed capacity rates and energy rates linked to coal prices and inflation indices (i.d. at 1-10). The Department finds that the proposed contract with NYSEG will enable the Company to conform to its resource planning guideline, as stated in the supply-side RFP, of limiting dependence on a single unit (i.d. at 1-2). By purchasing this capacity, the Company would have the option to sell capacity from one of the units which currently constitutes more than fifteen percent of the Company's mixwhile maintaining sufficient capacity to meet customer demands. The Department finds that this purchase is sufficiently consistent with the RFP is sued pursuant to the Settlement approved by the Department in D.P.U. 92-181, is the result of the resource evaluation process approved by the Department in Section III. Babove, and is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at

the lowest cost to soci ety. Therefore, the Department approves the NYSEG System Purchase as part of the Company's Phase III resource plan, subject to conditions identified in Section III.C.3.e., below.

d. <u>Newington Unit Purchase</u>

The Company stated that the proposal from NU resulted in an agreement for the purchase of 5 MW of capacity and energy from NU's dual-fueled (oil- and gas-fired) Newington unit, between November 1, 1998 and October 31, 2008 (i.d. at 2-8). As with the proposed NYSEG System Purchase, payments for energy would be tied to fuel costs and inflation indices, while capacity payments would be fixed (i.d. at 1-10).

As the Company testi fied, the NU purchase will allow the Company to limitits reliance on a single fuel type (in this case, coal) to less than fifty percent (fr. 1, at 96). The Department finds that the proposed NU contract will enable the Company to conform to its resource plaming guideline, as stated in the supply-side NFP, of limiting dependence on a single fuel type (Exh. FGE-1, at 1-2). The Department finds that this purchase is sufficiently consistent with the NFP is sued pursuant to the Settlement approved by the Department in D.P.U. 92-181, is the result of the resource evaluation process approved by the Department in Section III. Babove, and is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society Therefore, the Department approves the Newington Unit Purchase as part of the Company's Phase III resource plan, subject to conditions identified in Section III.C.3.e., below.

e. <u>Fi tchburg Uni t 7 Sale</u>

The Company stated that by committing to capacity purchases in the post-1998

ti meframe, the Company found that i twould have more capacity on its system than necessary to meet NEPOOL requirements (Ir. 1, at 55). The Company indicated that, while the NYSEG System and Newington Unit Purchases would offer savings to ratepayers, the Company could achieve even greater savings by selling a portion of the output of Fitchburg Unit 7, which would represent excess capacity (i.d. at 56).

Therefore, the Company indicated that it proposed the sale of a portion of the output of Fitchburg Unit 7 to UPC. This proposal resulted in an agreement under which UPC would purchase a 15 MW entitlement in Fitchburg Unit 7 (Exh. FGE-1, at 2-5). The Company stated that it would retain operational control of the unit, in order to maintain system reliability within its service territory (i.d.). By less ening the Company's dependence on its largest unit, the sale allows the Company to approach compliance with its guideline of limiting dependence on a single unit to fifteen percent of the Company's load. Accordingly, the Department finds that this transaction is a critical component of the Company's least-cost plan.

The Company di di ndi cate that the sale of Fi tchburg Uni t7 would not occur unless both the NYSEG System and Newi ngton Uni t purchases are consummated (Tr. 2, at 24). The Department observes that the cost-effecti veness of the NYSEG and NU purchases, when set apart from the ComElectri c purchase, is marginal and that the real value of these purchases lies in the fact that they would create an opportunity for the Company to sell a portion of the output of Fi tchburg Unit7 while still maintaining sufficient capacity to meet customer demands (Exh. DPU-69). Within this context, the Department finds that the sale of a portion of the output of Fi tchburg Unit7 is consistent with the Settlement approved by the

Department in D.P.U. 92-181, is the result of the resource selection process approved by the Department in Section III. B above, and is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society Therefore, the Department approves the Fitchburg Unit 7 Sale as part of the Company's Phase III resource plan. However, the Department conditions approval of the Company's resource plan, as pertains to the NYSEG System and Newington Unit purchases and the sale of a portion of the output of Fitchburg Unit 7 that the Company has proposed, upon the signing and approval of contracts for the purchase of NYSEG system power and Newington unit power, and upon the sale of a portion of the output of Fitchburg Unit 7.

4. <u>Demand-Si de Management Resources</u>

a. Introduction

The Company's proposed resource planincludes five DSM programs - the Company's three ongoing C&I programs and two new residential programs solicited through the DSM RFPs (Exh. FGE-1, Part 3). The ongoing C&I programs are (1) the Small Lighting Program, targeted at C&I customers whose demand does not exceed 30 KW; (2) the C&I Lighting Program, targeted at C&I customers whose demand exceeds 30 KW; and (3) the Comprehensive Efficiency Program, targeted at C&I customers whose demand exceeds 100 KW. The two new residential programs are (1) the Residential Space Heat Program and (2) the Residential Lighting Catalog Program. Table 1 summarizes the projected program activities for the years 1994 and 1995.

In this Section of the Order, the Department addresses whether each of the proposed DM programs (1) is a legitimate result of the resource evaluation process approved by the

Department in Section III.B, above, and (2) is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. In addition, the Department addresses whether the M&E plans submitted by the Company for each program are consistent with the directives stated in D.P.U. 92-181 and with Department precedent regarding M&E activities (see Section II.A above).

b. Residential Electric Space Heat Program

i. <u>Description</u>

(A) Program Design

The Company is sued an RFP for "turnkey" implementation of the RESH Program on March 31, 1993. Pursuant to its resource evaluation process, described in Section III.B, above, the Company selected Conservation Services Group ("CSG") to provide implementation services for the RESH program during 1994 and 1995 (Exh. FGE-1, at 3-2; Exh. DPU-29).

The RESH program is designed to reduce the electricity consumption of residential customers having electrically heated dwellings, both single-and multi-unit dwellings (Exh. FGE-1, at 3-18). Installed measures include high efficiency lights, a hot water package, air sealing measures, and insulation-type measures (i.d.). The program is designed so that Fitchburg would pay 100 percent of the costs associated with the installation of the DMM measures and participants would pay the costs associated with additional ventilation

The Company testi fi ed that the RESHRFP was intended to solicit proposals for implementation services provided within the context of a DSM program designed and to be overseen by the Company (Tr. 1, at 38).

requirements (<u>i d.</u>). The Company proposed to provide DSM services through this program to 79 customers annually in 1994 and 1995 (<u>i d.</u> at 3-19). The program's benefit/cost ("B/C") ratio for 1994 and 1995 is projected to be 1.79 (RR-DPU-2).

The Company indicated that, at the recommendation of CSG, the proposed level of participant contributions was modified from the level described in the RFP (Exh. FGE-1, at 3-18). According to the Company, CSG stated that this modification would (1) ensure that the Company's payments are for energy-saving improvements only, and not to improve ventilation, which should be considered a home improvement, (2) make it easier for customers to understand their share of program costs, (3) simplify the administration of the program (Exh. DPU-52). In addition, CSG indicated that this level of participant contributions has been shown to work well for other utilities (i.d.). The Company projected that the revised contribution levels would increase its costs by approximately \$700/yr, or less than one percent of the RESH Program's total costs (id.; Exh. DPU-35).

The Company projects that the 79 annual participants would include 45 customers residing in single family buildings and 34 customers residing in multi-family buildings (Exh. DPU-55). The Company indicated that, although CSG is not required to provide services to a specific number of multi-family and low-income customers, the Company will monitor participation levels for these customers to determine whether it would be appropriate to target these customers specifically (Exh. DPU-57).

The participant contribution levels described in the RFP would have had the Company pay 100 percent of the costs associated with lighting and hot water measures, and participants pay 90 percent of the costs associated with air sealing, ventilation, and insulation measures (Exh. FGE-1, at 3-18).

This amount is based on the assumption that 35 percent of the program participants will require additional ventilation work.

(B) Proposed 1994 M&E Acti vi ti es

In the savings verification planincluded with its bidproposal, CSG proposed to verify program savings and the persistence of those savings over time through the use of a computerized billing analysis (Exh. FGE-1, Part 3, Attachment 1). CSG stated that the billing analysis will compare the electric bills of program participants to the electric bills of a randomly-chosen, stratified comparison group (i.d.). CSG stated that participants' bills will be reevaluated at six month intervals during the entire term of the project, in order to measure the persistence of program savings (i.d.).

The Company stated that it would conduct random site visits and callbacks to review the quality of work performed and equipment installed by CSG and would monitor the comprehensiveness of measures installed through monthly reports submitted by CSG (i.d. at 3-24). In addition, the Company stated that it would perform impact and process evaluations for this program, to be submitted with its semiannual Variance and Process Reports (i.d.). The Company stated that its impact evaluation will include a comparison of actual program results with its projected activities (Exh. DPU-59). The Company stated that the process evaluation will consist of the following components: (1) a review of the characteristics of participants and nonparticipants; (2) a review of marketing effectiveness; (3) a review of program delivery effectiveness; and (4) a review of the characteristics of the energy conservation measures installed through this program (Exh. DPU-60).

CSG stated that all program participants who have sufficient billing data will be included in the billing analysis (Exh. FGE-1, Part 3, Attachment 1).

ii. Analysis and Findings

The RFP for the turnkey i mplementation of the RESH Program was is sued pursuant to the Settlement approved by the Department in the Company's Phase I proceeding. In this Phase III review, the Department has found that the RFP's ranking criteria and the Company's resource evaluation process were consistent with the requirements set forth in the IRM regulations (see Section II.B and III.B, above). Accordingly, the Department's Phase III review of the RESH Program will focus on (1) whether the proposed level of participant contributions, modifieds ince the Phase I approval of the RFP, is reasonable, and (2) whether the proposed M&E plans are consistent with the directives stated in D.P.U. 92-181 and with Department precedent regarding M&E activities.

Wi threspect to the modi fi edparti ci pant contri buti on levels, the Department agrees wi th the Company's contenti on that the modi fi edlevels should simplify the implementation and administration of this program, while having only a minimal effect on the amount of total program costs that are borne by non-participants. Accordingly, the Department finds that the modified participant contribution levels are reasonable.

The Company was directed to submit M&E plans for this program that identify, at a minimum, "(1) the plans for verifying that the DSM measures are properly installed, (2) the party that will conduct the impact evaluation and the types of impact evaluation methods to be used, and (3) the process evaluation plans." D.P.U. 92-181, at 20-21. The Department

The Department notes that the modification of the participant contribution levels results primarily in a redistribution of the program costs that are borne by program participants.

finds that the M&E plans submitted by the Company satisfy these directives for the following reasons: (1) the Company stated that it would visit two sites per week, selected on a random basis, to review the quality of work performed and equipment installed by CSG; (2) the M&E plans contain sufficient information regarding CSG's proposed impact evaluation activities; and (3) the Company stated that it would perform a process evaluation of this program.

The Department has previously stated that billing analysis, with the use of a comparison group, is an appropriate measurement technique for determining estimated energy savings. Western Massachusetts Electric Company, D.P.U. 91-44 ("D.P.U. 91-44"), at 139 (1991); Massachusetts Electric Company, D.P.U. 90-261, at 103 (1991). In addition, the Department has previously emphasized the importance of measuring persistence of program savings. D.P.U. 91-44, at 148; D.P.U. 90-261, at 111. The Department finds that the Company's 1994 impact evaluation plans for this program, as described above, are consistent with Department precedent.

Based on the above analysis, the Department finds that the RESH Program is sufficiently consistent with the RFP is sued pursuant to the Settlement approved by the Department in D.P.U. 92-181, is consistent with the RFP's ranking system approved by the Department in Section I.Babove, is the result of the resource evaluation process approved by the Department in Section III. Babove, and is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society Therefore, the Department approves the RESH Program as part of the Company's Phase III resource plan. The Department notes that its approval of this program was in part based on

a review of the CC rates and bill impacts that would result from the implementation of this program and the other proposed DSM programs, as identified in Exhibit FGE-1 at 5-7, 8. Therefore, the Department's approval of this program is conditioned upon the calculation and implementation of CC rates that are largely consistent with the proposed CC rates identified in the Company's Phase III filing, as summarized in Table 4 attached to this Order.

c. <u>Residential Lighting Catalog Program</u>

i. <u>Description</u>

(A) <u>Program Design</u>

The Company i ssued an RFP for "turnkey" i mplementati on of the RLC Program on March 31, 1993.²⁹ Pursuant to i ts resource evaluati on process, described in Section III.B, above, the Company selected Energy Federati on Inc. ("EFI") to provide implementation services for the RLC program during 1994 and 1995 (Exh. FGE-1, at 3-2; Exh. DPU-30).

The RLC Program is designed to provi de residential customers access to energy efficiency lighting products via a Company-sponsored mail-order catalog (Exh. FGE-1, at 3-25).³⁰ A maximum of eight energy-efficient lighting measures will be available to residential customers (Tr. 2, at 55).³¹ Fitchburgwill subsidize 50 percent of the retail costs

The Company testi fi ed that the RLC RFP was intended to solicit proposals for implementation services provided within the context of a DSM program designed and to be overseen by the Company (Tr. 1, at 38).

The Company stated that a secondary objective of this program is to develop a market-driven demand for energy-efficient lighting products to encourage distribution through retail channels (Exh FGE-1, at 3-25).

The Company i ndi cated that i t expects that the average customer order will be four bulbs (Tr. 2, at 55).

of the products (Exh. FGE-1, at 3-25). The Company stated that i twould moni tor program performance to assess the appropri ateness of the rebate Level (Exh. DPU-41). The Company proposed to serve 798 participants during 1994 and 912 participants during 1995. The B/C ratio for 1994 and 1995 is projected to be 2.80 (RR-DPU-6).

(B) Proposed 1994 M&E Activities

In the savings verification planincluded with its bid proposal, EFI proposed to verify program savings through site visits to catalog customers (Exh. FGE-1, Part 3, Attachment 2). EFI stated that the purpose of the site visits, which will be performed after nine months of program operation, when a sizable number of visits will have been completed and program refinements will have occurred, is to verify the installation of the lighting measures (id). EFI claimed that the use of a billing analysis to determine energy savings for this program would be costly and would not necessarily provide useful results because lighting is generally a small part of residential customers' total energy usage (id).

programs in an effort to gain more information about burn-times of bulbs purchased through this type of program (NR-DPU-9). EFI stated that burn-times reported in these evaluations will be used to verify burn-time information collected during its site visits to program participants (i.d.). In addition, EFI proposed to estimate coincident peak demand

EFI stated that, from a random sample of 300 program participants, a mi ni mum of 200 si tes wi II be vi si ted (Exh. FGE-1, Part 3, Attachment 2).

These utilities include Pacific Gas and Electric Company, New England Electric Power Company, and Wisconsin Power and Light Company (RR-DPU-9).

savings using residential load curves analyses performed for NYSEG, New England Electric System, and NU (Exh. FGE-1, Part 3, Attachment 2).

Fitchburg stated that it will conduct random callbacks to review the quality of services provided by EFI and the quality of equipment purchased. In addition, Fitchburg states that it will perform impact and process evaluations for this program, to be submitted with its semi-annual Variance and Process Reports (i.d. at 3-30, 31).

ii. <u>Analysis and Findings</u>

The RFP for the turnkey i mpl ementati on of the RLC Program was i ssued pursuant to the Settlement approved by the Department in the Company's Phase I proceeding. In this Phase III review, the Department has found that the RFP's ranking criteria and the Company's resource evaluation process were consistent with the requirements set forth in the IMM regulations (see Sections II.B and III.B, above). Accordingly, the Department's Phase III review of the RLC program will focus on whether the proposed MRE plans are consistent with the directives stated in D.P.U. 92-181 and with Department precedent regarding MRE activities.

The Company was directed to submit M&E plans for this program that identify, at a minimum, "(1) the plans for verifying that the D\$M measures are properly installed, (2) the party that will conduct the impact evaluation and the types of impact evaluation methods to be used, and (3) the process evaluation plans." D.P.U. 92-181, at 20-21. The Department finds that the M&E plans submitted by the Company satisfy these directives for the following reasons: (1) the Company stated that it would conduct callbacks to review the quality of work performed by EFI and the quality of equipment purchased; (2) the M&E plans contain

sufficient information regarding EFI's proposed impact evaluation activities; and (3) the Company stated that it would perform a process evaluation of this program.

The Department has previously stated that companies should pursue the measurement of DSM program savings to the extent that the marginal value of the measurements exceed the marginal cost of obtaining the measurements. Boston Edison Company, D.P.U. 90-335, at 100 (1992). The Department finds that EFI, in proposing to estimate program savings using site visits, in combination with bulb burn-time and coincident peak demand information provided by other utilities' studies, has appropriately considered the marginal value and cost associated with various measurement activities. Thus, the Department finds that the Company's 1994 impact evaluation plans for this program, as described above, are consistent with Department precedent.

Based on the above analysis, the Department finds that the NLC Program is consistent with the NFP is sued pursuant to the Settlement approved by the Department in D.P.U. 92-181, is the result of the resource evaluation process approved by the Department in Section III Babove, and is consistent with them ix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. Therefore, the Department approves the NLC Program as part of the Company's Phase III resource plan. The Department notes that its approval of this program was in part based on a review of the CC rates and bill impacts that would result from the implementation of this program and the other proposed DSM programs, as identified in Exhibit FGE-1 at 5-7, 8. Therefore, the Department's approval of this program is conditioned upon the calculation and implementation of CC rates that are largely consistent with the proposed CC rates identified

in the Company's Phase III filing, as summarized in Table 4 attached to this Order.

d. Small Commercial Lighting Program

i. <u>Description</u>

(A) <u>Program Desi gn</u>

The Company began i mplementati on of the Small Commercial Lighting Program in 1992 (Exh. DPU-77, at 2-1). The program is designed to increase the efficiency of commercial lighting equipment through the installation of energy efficient lighting fixtures, ballasts, lamps, and other energy efficient lighting equipment, and is targeted at small commercial customers whose demand is under 30 KW (i.d.). Energy efficient lighting products are installed in participating facilities at no cost to the customer (i.d.).

The Company proposes to provi de servi ces annually to 70 customers in 1994 and 1995 (Exh. FGE-1, at 3-38). The B/C ratio for these years is projected to be 1.95 (<u>i.d.</u>). The Company projects to have served 13 percent of the 2,655 customers that are eligible to participate in this program through 1995 (i.d.).

(B) Proposed 1994 M&E Acti vi ti es

The Company stated that its 1994 M&E plans for this programs include both impact and process evaluations (Exh. FGE-1, at 3-36). The proposed impact evaluation includes the following activities: (1) billing history analysis; (2) savings and cost variance analysis; (3) installation and equipment analysis (i.d.). The proposed process evaluation includes the following activities: (1) a review of marketing techniques and customer response rates; (2) a

The Company testi fi ed that i t currently projects that this level of participation represents the saturation of the market for this program (Ir. 2, at 68).

review of suppliers and equipment installers (including both the selection process of vendors and their performance); and (3) a review of the characteristics of participating customers (e.g., size, SIC code) (id.).

The Company stated that, in 1992, it performed a billing analysis of program particle pants to determine the estimated energy savings for this program (Exh. DPU-77, at 2-9). The billing analysis compared the pre- and post-installation energy usage of 500 customers who particle pated in the program (the "particle pant" group) and 500 randomly-chosen customers who were not program particle pants (the "comparison" group). In addition, the Company stated that it determined the 1992 estimated demand savings for this program based on pre- and post-installation metering of a representative sample of lighting circuits at the sites of 1992 program particle pants (Tr. 2, at 147). The Company applied a five percent free-rider adjustment to program demand and energy savings, based on data obtained from other electric utilities (Exh. DPU-77, Appendix TA-4). Finally, the Company stated that, as part of its 1992 pre- and post-installation audits at program particle pants is tes, it surveyed particle pants for estimates of lighting hours-of-use (Exh. DPU-77, at 2-11). The Company stated that the lighting hours-of-use reported by particle pants was significantly lower that

Energy usage in the pre-installation period was measured from October 1991 through March 1992; energy usage in the post-installation period was measured from October 1992 through March 1993.

Coi nci dent peak demand savi ngs were esti mated based on Load research data (Tr. 2, at 148).

Ii ghti ng hours-of-use data provi ded by $NEPOOL^3$ and hours-of-use data i mpli ed by the billi ng analysi s. The Company clai med that these compari sons i ndi cate that parti ci pants underesti mate their li ghti ng hours-of-use (<u>i d.</u>).

ii. <u>Analysis and Findings</u>

The Small Commercial Lighting Program was not selected through a competitive RFP is sued in the context of the Company's current I MM proceeding. The Department notes, however, that the design of this program has previously been reviewed and approved by the Department, and that impact and process evaluations of this program indicated that the program was implemented cost-effectively during 1992. See Fitchburg Gas and Electric Light Company, D.P.U. 89-179 (1991) ("D.P.U. 89-179"). Accordingly, the Phase III review of this program will focus on two issues: (1) the lack of participant contributions; and (2) whether the proposed M&E plans are consistent with the directives stated in D.P.U. 92-181 and Department precedent regarding M&E activities.

The Department has previously stated that companies are expected to "actively investigate and implement" increased participant contributions in their DSM programs.

Western Massachusetts Electric Company, D.P.U. 92-13, at 11 (1992). The Department expects that the Company will propose participant contribution levels for this program in its

The NEPOOL data i ndi cated an average of approxi mately 5,000 annual hours of lighting usage for these customers, while the estimates reported by participants were approximately 2500 hours (Exh. DPU-77, at 2-24).

The Company submitted its 1992 impact and process evaluations reports of this program with its DSM Variance and Process Report, submitted to the Department on June 8, 1993. See Exh. DPU-77.

next IRM cycle.

The Company was directed to submit M&E plans for this program that comply with Department precedent as it relates to process and impact evaluations. D.P.U. 92-181, at 21. The Department has previously stated that billing analysis, with the use of a comparison group, is an appropriate measurement technique for determining estimated energy savings. D.P.U. 91-44, at 139; D.P.U. 90-261, at 103. Accordingly, the Department finds that the Company's proposal to use billing analysis to determine its estimated energy savings for this program during 1994 is consistent with Department precedent.

The Department, however, has concerns regarding the Company's use of a randomly-selected compari son group in its 1992 billing analysis. The Department notes that the purpose of using a comparison group in a billing analysis is to provide information regarding what the energy usage of program participants would have been in the absence of participation in the program. Thus, it is important that the comparison group be comprised of customers whose energy usage patterns are reflective of the energy usage patterns of the participant group. The Department is not convinced that a randomly-selected comparison group satisfies this criteria. Accordingly, the Company is directed to select the comparison group for its 1994 billing analysis from the list of customers waiting to participate in the program or to stratify the comparison group in an attempt to better reflect the energy usage patterns of the participant group, unless the Company can demonstrate that this directive is not appropriate.

As a final matter, the Department notes that the Company claimed that the lighting hours-of-use reported by program participants during 1992 were significantly lower than the

hours-of-use data provi ded by NEPOOL and the hours-of-use data i mpli ed by the billing analysis. In an effort to reconcile these different estimates, the Company is directed, as part of its 1994 impact evaluation activities, to perform hours-of-use metering of a representative sample of lighting circuits at the sites of 1994 program participants, through the use of lighting loggers or some other measurement technology. The results of this metering, in conjunction with the results of the pre- and post-installation metering of lighting demand load, may be used to verify the results of the billing analysis.

Based on the above analysis and subject to the conditions stated above, the Department finds that the Small Commercial Lighting Program is the result of the resource evaluation process approved by the Department in Section III. B above, and is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. Therefore, the Department approves the Small Commercial Lighting Program as part of the Company's Phase III resource plan. The Department notes that its approval of this program was inpart based on a review of the CC rates and bill impacts that would result from the implementation of this program and the other proposed DSM programs, as identified in Exhibit FGE-1 at 5-7, 8. Therefore, the Department's approval of this program is conditioned upon the calculation and implementation of CC rates that are largely consistent with the proposed CC rates identified in the Company's Phase III filing, as summarized in Table 4 attached to this Order.

e. C&I Lighting Program

i. Description

(A) <u>Program Design</u>

The Company began i mpl ementing the C&I Lighting Program in 1991 (Exh. FGE-77, at 3-1). The program is targeted at commercial and industrial customers whose average monthly demand exceeds 30 KW (i.d.). 39 Pre-calculated rebates are based on the additional costs of installing energy efficient lighting equipment rather than standard lighting equipment, not to exceed 50 percent of the total equipment and installation costs (Exh. FGE-1, at 3-41). 40 The cost-effectiveness of each project and the rebate amounts are determined by a pre-installation audit, including metering of existing lighting equipment demand. Installation of equipment is completed by a customer-selected contractor. The Company performs a post-installation audit and verifies the reported demand reduction before a rebate is issued to the customer (id.).

The Company proposed to provi de servi ces, both in 1994 and 1995, to customers whose 1992 sales equal approximately 18,000 MWH (Exh. FGE-1, at 3-41). The B/C Ratio is projected to be 1.80 in 1994, and 1.85 in 1995 (i.d. at 3-43). The Company projects

There are 346 customers eli gi ble to parti ci pate i n thi s program (Exh. DPU-77, at 3-11).

The Company stated that the rebate levels for equi pment replacement are set to encourage the replacement of lighting systems and hardwired fixtures, rather than simple lamp replacements (Exh. FGE-77, at 3-1).

The Company stated that, because of the heterogenei ty of the customers eligible to participate in this program, participation is expressed in MMH sales rather than number of customers (Tr. 2, at 77).

that, through the end of 1995, it will have captured 27.3 percent of the available lighting savings for these customers, as determined by its technical potential report (i.d., at 3-41).42

The Company stated that, in response to a Department directive in D.P.U. 89-179, it is first DSM preapproval proceeding, it analyzed participation in this program during 1991 and 1992 by small to medium size customers (i.e., those whose demand do not exceed 100 KW) (Exh. DPU-77, Appendix TA-3). The Company found that, all though customers of all sizes participated in the program, small to medium size customers did not participate to as great a degree as larger customers (i.e., those whose demand exceed 100 KW). The Company stated that, if the 1993 participation of small to medium size customers remains low, it will consider introducing a direct-mail marketing campaignaimed at these customers during 1994 (id.).

(B) Proposed 1994 M&E Acti vi ti es

The Company stated that i ts 1994 M&E plans for this programs include both impact and process evaluations (Exh. FGE-1, at 3-42). The proposed impact evaluation includes the following activities: (1) billing history analysis of program participants; (2) metering of preandpost-installation KWI oads; (3) savings and cost variance analysis; and (4) installation and equipment analysis (i.d.). The proposed process evaluation includes the following activities: (1) a review of marketing techniques and customer response rates; (2) a review of suppliers and equipment installers (including both the selection process of vendors and their performance); and (3) a review of the characteristics of participating customer (e.g., size,

The Company testi fi ed that this level of participation represents its current projection of saturation for this program market (Tr. 2, at 77).

SIC code) (i d.).

In 1992, the Company determined the estimated demand savings for this program based on pre- and post-installation metering of lighting circuits at the sites of program participants (Ir. 2, at 164). In the determination of the estimated energy savings, the Company relied on hours-of-use data that was reported by participating customers, as compared to measured data (i.d.). The Company applied a 20 percent free-rider adjustment to program demand and energy savings, based on data obtained from other electricutilities (Exh. DPU-86).

The Company performed a bi II ing analysis of 1992 program participants in an effort to measure post-installation energy savings (Exh. DPU-17, at 3-8). In the results of the billing analysis showed that, of the eight 1992 participants included in the analysis, three participants showed a decrease in energy usage from the pre-installation to the post-installation period, four participants showed increased energy usage over the same period, and one participant's usage did not change significantly (i.d. at 3-11). The Company identified three problems with using billing analysis to estimate savings for participants in this program: (1) for those participants who increased load, decreased load, or shifted usage patterns in the post-installation period, the results of a billing analysis are difficult to

The Company stated that coincident peak demand savings was based on Load research data (Exh. DPU-85).

The Company stated that, for the eight program participant that had sufficient billing data, energy and demand usage during the pre-installation and the post-installation time periods were compared (Exh. DPU-77, at 3-8-9). The Company stated that, because of the difficulty in finding comparable customers within Fitchburg's service territory, a comparison group was not used in the analysis (i.d. at 3-12).

interpret; (2) lighting is generally a small part of these customers' overall load and thus may be indiscernible in the statistical variance of routine billing; ⁶ and (3) the difficulty in finding a comparable control group within Fitchburg's service territory, because of the relatively small size of its service territory and the heterogeneity of the participating customers (i.d. at 3-11, 12). The Company testified that, based on post-installation site visits, it was determined that all participants that showed increased usage in the billing analysishad undergone significant changes in their hours of operation (i.d.).

ii. Analysis and Findings

The CWI Li ghti ng Program was not selected through a competitive RFP is sued in the context of the Company's current IRM proceeding. The Department notes, however, that the design of this program has previously been reviewed and approved by the Department, and that impact and process evaluations of this program indicated that the program was implemented cost-effectively during 1992. See D.P.U. 89-179. Accordingly, the Phase III review of this program will focus on whether the proposed M&E plans are consistent with the directives stated in D.P.U 92-189 and Department precedent regarding M&E activities.

The Company was directed to submit M&E plans for this program that comply with

The Company stated that, based on end-use Load data, the average pre-i nstallati on Lighting Load of the 1992 program participants is approximately eight percent of their total energy requirements (Exh. DPU-92).

The Company submitted its 1992 impact and process evaluations reports of this program with its DSM Variance and Process Report, submitted to the Department on June 8, 1993. See Exh. DPU-77.

Department precedent as it relates to process and impact evaluations. D.P.U. 92-181, at 21. The Department notes that this program is the Company's Largest DSM program, in terms of dollars spent. The Department has previously stated that, for those programs where spending and savings levels are relatively high, companies should pursue pre- and post-installation measurement activities that will result in relatively high precision estimates of energy and capacity savings. D.P.U. 91-44, at 137. The Department has previously stated that savings estimates should be based on pre- and post-installation measurements and has rejected the use of engineering estimates to determine savings, except innarrowly defined circumstances. Id. at 143.

The Department notes that the Company conducted a billing analysis of program participants in an effort to measure post-installation energy savings and accepts the reasons given by the Company regarding why this type of analysis may not be appropriate for this program in its service territory. The Department directs the Company to explore methods by which billing analysis can be made applicable to this program (e.g., by the use of a multiple regression analysis or the use of comparison group usage data obtained from other electric companies). If the Company determines that the costs of conducting a billing analysis would exceed the value to be provided by the analysis, it should discontinue the use of billing analysis during 1994.

In addition, the Department directs the Company to perform hours-of-use metering of a representative sample of lighting circuits at the sites of 1994 program participants. The results of the hours-of-use metering, in combination with the results of the pre- and post-installation metering of lighting demand load, may be used to validate the energy

savings estimated by the billing analysis or, if the Company decides to discontinue the billing analysis, may be used as the sole determinant of energy savings estimates.

Based on the above analysis and subject to the conditions stated above, the Department finds that the CNI Lighting Program is the result of the resource evaluation process approved by the Department in Section III. Babove, and is consistent with them ix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. Therefore, the Department approves the CNI Lighting Program as part of the Company's Phase III resource plan. The Department notes that its approval of this program was in part based on a review of the CC rates and bill impacts that would result from the implementation of this program and the other proposed DNM programs, as identified in Exhibit FGE-1 at 5-7, 8. Therefore, the Department's approval of this program is conditioned upon the calculation and implementation of CC rates that are largely consistent with the proposed CC rates identified in the Company's Phase III filing, as summarized in Table 4 attached to this Order.

- f. Comprehensi ve Effi ci ency Program
 - i. Description
 - (A) Program Design

The Company began i mplementing the Comprehensive Efficiency Program in 1992 (Exh. DPU-77, at 4-1). The program is designed to solicit custom proposals from C&I customers whose demand exceeds 100 KW. Eligible measures include high-efficiency motors, variable speeddrives, storage cooling, building shell improvements, refrigeration and site-specific process energy improvements (i.d.). Rebates are based upon the value of the

demand and energy savings, not to exceed 50 percent of the total equipment and installation costs. The cost-effectiveness of each project and the rebate amounts are determined by a pre-installation audit, including metering of the targeted equipment demand. Installation of equipment is completed by a customer-selected contractor. The Company performs a post-installation audit and verifies demand reduction before a rebate is issued to the customer (id.).

The Company proposed to provi de servi ces, both in 1994 and 1995, to customers whose 1992 sales equal approximately 17,600 MWH (Exh. FGE-1, at 3-47). The B/C ratio is projected to be 2.25 during 1994 and 2.43 during 1995 (i.d. at 3-49). The Company projects that, through the end of 1995, it will have captured 11 percent of the available savings for these customers, as determined by its technical potential report (i.d. at 3-50).47

(B) Proposed 1994 M&E Activities

The Company stated that its 1994 M&E plans for this programs include both impact and process evaluations (Exh. FGE-1, at 3-48). The proposed impact evaluation includes the following activities: (1) billing history analysis of program participants; (2) metering of preandpost-installation KWI oads; (3) savings and cost variance analysis; and (4) installation and equipment analysis (id.). The Company stated that, because of the small number of program participants, no comparison group will be used in the billing analysis (id.). The Company asserted that detailed end-use metering of pre-and post-installation KWI oads, as well as hours of operation, should provide a more accurate estimate of the program savings

The Company testi fi ed that this level of participation represents its current projection of saturation for this program market (Tr. 2, at 172).

(i d.).

The proposed process evaluation includes the following activities: (1) a review of marketing techniques and customer response rates; (2) a review of suppliers and equipment installers (including both the selection process of the vendors and their performance); and (3) an analysis of the characteristics of participating customers (e.g., size, \$IC code) (i.d.). The Company stated one objective of the process evaluation is to identify reasons for non-participation from the eligible customer base in an effort to improve the program's cost-effectiveness (i.d.).

In 1992, the Company determined the estimated demand savings for this program based on pre- and post-installation metering of the targeted equipment (Exh. DPU-84). However, in the determination of the estimated energy savings, the Company relied on hours-of-use data that was reported by participating customers, as compared to measured data (i.d.). He Company applied a 20 percent free-rider adjustment to program demand and energy savings, based on data obtained from other electric utilities (i.d.). So

The Company reported that two customers participated in this program during 1992 (Exh. DPU-71, at 4-5). One participant installed high-temperature insulation blankets for 31 pieces of injection molding equipment (Exh. DPU-84). The reported savings from this project represented approximately 99 percent of the total program savings (Exh. DPU-71, at 4-5). The other program participant installed a high efficiency motor (Exh. DPU-84).

The Company testi fi ed that post-i nstallati on si tevi si ts confirmed that the measures were properly i nstalled, but the equi pment was not metered over a peri od of ti me due to the partici pant's concern that the metering would interrupt production at the facility (Exh. DPU-77, at 4-6).

The Company stated that coi nci dent peak demand savi ngs were based on I oad research data (Exh. DPU-84).

ii. Analysis and Findings

The Comprehensi ve Effi ci ency Program was not selected through a competitive RFP is sued in the context of the Company's current IRM proceeding. The Department notes, however, that the design of this program has previously been reviewed and approved by the Department, and that the impact evaluation of this program indicated that the program was implemented cost-effectively during 1992. See D.P.U. 89-179. Accordingly, the Phase III review of this program will focus on whether the proposed M&E plans are consistent with the directives stated in D.P.U 92-189 and Department precedent regarding M&E activities.

The Company was directed to submit M&E plans for this program that comply with Department precedent as it relates to process and impact evaluations. D.P.U. 92-181, at 21. The Department notes that this program is the Company's second largest DSM program in terms of dollars spent, and the largest program in terms of estimated savings. The Department has previously stated that, for those programs where spending and savings levels are relatively high, companies should pursue pre- and post-installation measurement activities that will result in relatively high-precision estimates of energy and capacity savings D.P.U. 91-44, at 137. The Department has previously stated that savings estimates should be based on pre- and post-installation measurements and has rejected the use of engineering estimates to determine savings, except in narrowly defined circumstances. Id. at 143.

The Company submitted its 1992 impact evaluation of this program with its DSM Variance and Process Report, submitted to the Department on June 8, 1993. See Exh. DPU-77.

Accordingly, the Department directs the Company to conduct pre- and post-installation metering of demand load and hours-of-use at the sites of all 1994 program participants.⁵²

Based on the above analysis and subject to the conditions stated above, the Department finds that the Comprehensive Efficiency Program is the result of the resource evaluation process approved by the Department in Section III. Babove, and is consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. Therefore, the Department approves the Comprehensive Efficiency Program as part of the Company's Phase III resource plan.

The Department notes that its approval of this program was inpart based on a review of the CC rates and bill impacts that would result from the implementation of this program and the other proposed DSM programs, as identified in Exhibit FGE-1 at 5-7, 8. Therefore, the Department's approval of this program is conditioned upon the calculation and implementation of CC rates that are largely consistent with the proposed CC rates identified in the Company's Phase III filing, as summarized in Table 4 attached to this Order.

g. <u>Summary of the Proposed DSM Resources</u>

Based on the analysis provided above and subject to the conditions stated above, the Department finds that the Company's proposed DSM programs are consistent with the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. However, the Department is concerned by the absence of lost opportunity

The Department notes that, for equipment that is subject to a variable power load, it is necessary to meter demand load over a period of time that captures the actual demand savings.

programs (i.e., new construction or renovation projects). The Company is directed to develop plans to address these market-driven DSM opportunities in its next IRM cycle. Finally, as stated in D.P.U. 92-181, at 19, the Company is expected, in its next IRM cycle, to submitplans for the competitive procurement of DSM resource in its service territory.

5. Summary of the Company's Proposed Resource Plan

Based on the analysis provided above and subject to the conditions stated above, the Department finds that the Company's proposed resource plan contains the mix of resources that is most likely to result in a reliable supply of electrical service at the lowest cost to society. Accordingly, the Department approves the proposed resource plan as submitted.

The Company will be expected to address the cost-effectiveness of joining the Super Efficiency Refrigeration Program. See Ir. 2, at 59-61.

IV. PHASE IV RESOURCE CONTRACTING

A. Introduction

In Phase IV, the IRM regulations specify procedures for Department review of contracts with project developers approved in the Phase III resource plan, and the terms by which electric companies would recover costs for resources procured through those contracts. 220 C.M.R. § 10.06. The Company has requested Phase IV review of the contracts for its residential DSM programs, and the costs associated with the industrial, commercial, and residential DSM programs included in the resource plan for which it would seek recovery through its CC. In this section, the Department conducts a Phase IV review of the Company's residential DSM programs.

The Company contended that the contract for sale of an entitlement in the Fitchburg Unit 7 to UPC does not require approval by the Department in Phase IV of the IMM process, but would be filed with the Department as an affiliate transaction (Ir. 1, at 22-24). While the Department, in Section III.C, above, has noted that the sale of an entitlement in the Fitchburg Unit7 would affect approval of the NU and NYSEG resource acquisitions, the Department does not expect to review the contract for the sale of an entitlement in the Fitchburg 7 in a Phase IVIEM proceeding.

The Company also contended that, because of the short-term duration of the obligation undertaken by the Company, approval of the ComElectric system purchase contract in Phase IV of the IM process is not necessary (i.d.). The IM regulations require the Department, in Phase IV, to review final contracts in an electric company's award group that have been approved by the Department in Phase III. 220 C.M.R. § 10.06(3). While the cost recovery provisions of individual contracts may differ, the Department must, in Phase IV, approve contracts for resource acquisitions between an electric company and project developers before cost recovery is allowed. 220 C.M.R. § 10.06(3). Accordingly, the ComElectric system purchase, as well as the NYSEG and Nuresource acquisition contracts must be approved by the Department in Phase IV before cost recovery is allowed. The Department expects that contracts submitted in Phase IV will be consistent with the rates, terms and conditions for the resource acquisitions that have been approved by the Department as part of the Company's Phase III resource plan.

B. Standard of Review

Upon Department approval of projects as part of an electric company's Phase III resource plan, the IMM regulations require the electric company to negotiate contracts with the providers of new resources. 220 C.M.R. § 10.06(2). The IRM regulations require contractual agreements for payments to resource providers to be based on actual performance (savings measurement where DSM programs are concerned) to the greatest extent possible, and to incorporate milestone schedules and security provisions, where applicable. The IRM regulations also specify that alternative security provisions, agreed to by an electric company and resource providers, and approved by the Department, may be allowed. The IRM regulations require that an electric company and project developers shall agree to a pricing formula, and terms and conditions that are consistent with project proposals approved by the Department in Phase III. Id.

In Phase I V of the I RM process, the Department reviews final contracts between an electric company and project developers to determine whether the contracts comply with the I RM regulations and are in the public interest. 220 C.M.R. § 10.06(3). Where the rates, terms and conditions for the resource acquisition are approved by the Department at the conclusion of Phase I V of the I RM process, the costs incurred by an electric company for the acquisition of electricity or electricity savings are recoverable through rates charged to the company's customers. 220 C.M.R. § 10.06(4).

C. <u>Contract Approval</u>

The Company has requested Phase IV review of the contracts by which it would implement the RESH and RLC programs. The Company stated that, because the DSM RFPs

were intended to solicit proposals for development and implementation of programs that were designed by the Company, the residential DSM programs are Company-managed programs and that the contractors are providing installation services for the Company (Ir.1, at 37-38). The Company contended that the security requirements of the LBM regulations should be applicable to DSM programs that are not managed by the Company, but should not be required for those that are managed by the Company (i.d.). The Company also contended that its contracts for which it is seeking approval contain adequate milestone provisions (i.d. at 39-40).

The IMM regulations prescribe a number of security-related contract provisions in order to protect ratepayers against nonperformance by a resource provider. In reviewing the EFI and CSG contracts that have been submitted for approval, the Department finds that the ratepayers are provided protection through other provisions. First, CSG and EFI are compensated only for services and equipment actually provided to the Company's customers (Exh. FGE-1, Appendix B, Appendix C). Second, the Company would receive monthly reports detailing the work provided (i.d.). The contracts with CSG and EFI include provisions that requires all services to be performed to the satisfaction of the Company (i.d.). In additional, the contracts provide that either party may terminate the contract on December 31, 1994 (i.d.). Further, the Department finds that the milestone schedules for the RESH and RLC programs provide sufficient definition regarding Company expectations of customer participation and resultant energy savings. Accordingly the CSG and EFI contracts are sufficiently in compliance with the security and milestone provisions of the IMM regulations.

In D.P.U. 92-181, at 19, the Department stated that the Company must incorporate greater competition and performance-based cost recovery into all future resource solicitations, including DSM. The Department expects that DSM programs that result from a competitive solicitation of DSM resources will require compliance with the security provisions of the LBM regulations. See Commonwealth Electric Company and Cambridge Electric Light Company, D.P.U. 91-234 (1993). Further, the Department, in future LBM resource solicitations, expects the Company to tie security provisions to a milestone schedule. Id., at 72.

For the purposes of this proceeding, the Department finds that the terms and conditions of the CSG contract are consistent with the IMM regulations, and are in the public interest. Accordingly, the contract between the Company and CSG is approved, subject to the submission of a final contract consistent with the terms and conditions of the contract submitted by the Company.

Further, the Department fi nds that the terms and conditions of the EFI contract are consistent with the IMM regulations, and in the public interest. Accordingly, the contract between the Company and EFI is approved, subject to the submission of a final contract consistent with the terms and conditions of the contract submitted by the Company.

V. <u>OTHER I SSUES</u>

A. IRM Administrative Costs

1. The Company Proposal

The Company has requested the Department's approval of transferring recovery of costs associated with the IM process, including supply purchase, solicitation, negotiation,

and contracting from base rates to the fuel charge at the time of the Company's next base rate case or rate design proceeding (Ir. 1, at 41-42). The Company stated that the Department's regulatory review of the Company's planning, solicitation, negotiation, and contract acquisition processes is extensive, and that costs associated with the IMM process may be under-or over-recovered depending on rate case test year (Ir. 2, at 6-8). Although the Company has requested recovery of all IMM process costs in the fuel charge, the Company acknowledged that some level of planning and related administrative costs is presently reflected in base rates, and stated that the principle change brought on by the IMM regulations is the solicitation and procurement processes (Ir. 2, at 15-17). The Company stated that it would be possible to identify the level of resource planning and administrative costs currently in base rates (id. at 19).

In support of its request, the Company stated that, through a CC recovery mechanism, the Department allows recovery of costs associated with planning and development of demand-side resources (Exh. FGE-1, at 6-2). The Company also stated that the Department allows recovery of the development costs associated with new utility generation (i.d.). The Company contended that recovery of planning and development costs associated with power-supply purchases, and specifically power-supply purchases resulting from implementation of the IM process, would be consistent with recovery of development costs associated with electric company investment in new generation facilities and electric

Ori ginally, in its Phase III filing, the Company had requested that it recover costs associated with the IM process through a base rate case proceeding, and that for the period between rate cases, recovery of these costs through the fuel charge be allowed (Exh. FGE-1, at 6-3).

company investment in DSM resources (<u>i.d.</u> at 6-3). In further support of its request, the Company stated that the principal advantage of the proposal is that it would eliminate any disincentive for electric companies to undertake aggressive and comprehensive solicitation, negotiation, and acquisition processes (Tr. 2, at 5). ⁵⁶

2. <u>Analysis and Findings</u>

The Company asks the Department to consider whether the recovery of costs associated with the IMM process should be treated differently than the recovery of other operations and maintenance ("O&M") expenses. The Department finds that recovery of administrative costs associated with implementation of the IMM process is properly addressed within the context of the Company's next base rate case proceeding. Therefore, the Company should make its request within the context of its next base rate case proceeding.

B. <u>Demand-Si de Ratemaki ng Issues</u>

In its Phase III filing, the Company requested that the Department approve the cost recoverymethodology and specific CC rates associated with each rate class (FGE-1, at 5-1). The IMM regulations state that an electric company shall provide all the information required for Department review for preapproval ratemaking treatment including detailed cost information, output price, and proposed method of cost recovery. 5758 220 C.M.R.

The Company contended that a di si ncenti ve exi sts when the benefi ts of those processes, in the form of reduced power costs, would flow to ratepayers, while the incremental costs would be borne by shareholders (Tr. 2, at 5).

The Department notes that any electric company seeking approval of DSM programs should, in its filing to the Department, include CC rates and bill impacts that would result from implementation of the DSM programs as proposed.

§ 10.05(2)(i). The Department finds that the Company fully complied with the IRM regulations as they relate to providing the relevant cost recovery information.

Based on a li mi ted revi ew of the Company's cost recovery information, the Department notes several inconsistencies with established precedent. First, the Company has proposed to allocate DSM expenditures associated with programs that serve more than one rate class by each rate class' total KWH use (RR-DPU-10). The Company's proposal is not consistent with the policy established in Massachusetts Electric Company, D.P.U. 89-194/195, at 211 (1990), where the Department stated that cost allocation should be designed to reflect the Company's costs to serve each rate class, directly assigning those costs associated with providing services to a class and allocating joint and common costs when direct assignment is impossible.

The Company also proposed to allocate savings-related revenue (i.e., LBR and SSI) using the same methodology (Tr. 2, at 99). The Company's proposal is not consistent with the policy established in Commonwealth Electric Company/Cambridge Electric Light Company, D.P.U. 91-80 Phase Two-A at 138 (1992). In that case, the Department determined that DSM cost recovery of should be appropriately allocated to the various rate classes that have received the benefits of the expenditures. Id. The Department has also found that recovery of revenue that relates to the savings achieved through DSM programs

The IM regulations also state that for each DSM resource for which the Company requests ratemaking treatment to compensate for revenue erosion, the electric company shall provide sufficient documentation to demonstrate that the performance of the DSM resource will result in revenue erosion that adversely affects the company's revenues in a significant, quantifiable way. 220 C.M.R. § 10.05(2)(j).

should be allocated to the rate classes in which the savings occur. Boston Edison Company, D.P.U. 91-233-A at 7-8 (1994).

Wi th regard to the RESH program, the Company proposed to calculate LBR based on a fixed quantity of energy and capacity savings per installation regardless of the season (i.e., wi nter/summer) (Ir. 2, at 98; Exh. FGE-1, Section 5, Table R194.XLS at 3). The Company's proposal is not consistent with the Department's Order in Western Massachusetts Electric Company, D.P.U. 89-260 ("D.P.U. 89-260"), at 107-108 (1990), stating that it is important to use the most accurate after-the-fact measurement of energy and capacity savings available in quantifying the amount of lost fixed revenues a company is allowed to receive.

Further, in the instant proceeding, the Company proposed not to reconcile its incentive payment based on actual savings achieved, but rather based on measures installed and the forecast of the value of those measures at a point in time (Ir. 2, at 127). The Company proposal is not consistent with our policy as stated in Mestern Massachusetts Electric Company, D.P.U. 91-44 (1991). In that case, the Department directed the company to perform a double record liation of its savings estimates in order to calculate its incentive, and that this reconciliation should be performed annually, concurrent with other reconciliations related to DSM program implementation. Id. at 118, 119. The Department further specified that recovery of the financial incentive should be based on actual savings, rather than expenditures or estimated savings. Id.

Finally, in this proceeding, the Department investigated whether costs traditionally recovered through base rates that are avoided due to DSM program implementation should be subtracted from the calculation of LBR (Tr. 2, at 134-135). The Company responded that

the issue could be analyzed in greater detail, and that over time, some reduction of NO expenditures may be appropriately subtracted from LBR recovery for companies, such as Fitchburg, that are able to avoid base rate cases for extended periods of time (NR-DPU-10). The Company, however, indicated that such reductions to the LBR would not be justified at this time (id.). 59

When i ni ti ally exami ni ng the need to allow electric companies to recover LBR, the Department stated that it would entertain proposals for lost revenue adjustments if a company candemonstrate that "the successful performance of its C&LM programs will result in sales erosi on that adversely affects revenues in a significant, quantifiable way." D.P.U. 86-36-F at 35-36 (1988). The Department later indicated that recovery of LBR might only be necessary for the short term because in the long term, companies will be able to adjust their operating costs to reflect the reduction in sales. D.P.U. 89-260, at 106. Specifically, the Department stated that

when vi ewed from a long-term planning perspective, electric companies will experience variable 0¼M [operation and maintenance] costs that are not reflected through the fuel charge. However, from the short term (e.g., less than one year) perspective, C&LM does not appear to resultinsignificant variable 0¼M savings for a Company's marginal generating facilities.

Id.

The Company stated that, although theoretically attractive, several considerations must be given to any reduction in the recoverable LBM. First, actual cost savings may accumulate very slowly; TMD investments can be "lumpy", and savings due to DSM may not supplant such investments until after a significant period of time. Second, only a portion of the Company's base rates would be affected and this portion could be quite small. Finally, any analysis on the issue should consider that if DSM programs had not been implemented, TMD expenses would have increased, and these increases would be incorporated in a base rate proceeding. In such a case, the Company asserts, DSM-related TMD expenditure savings are already reflected in lower base rates than would otherwise have been the case (i.d.).

The Department does not make specific findings on the proposed cost recovery methodology or CC rates in this Order. The Department directs the Company to file CC rates and supporting documentation, with a request for its revised rates to be effective on May 1, 1994. At that time, the Department will fully investigate and rule on all aspects of the Company's proposed cost recovery methodology associated with DSM program expenditures and related costs, including the LBR calculation. Further, the Department directs the Company to provide an analysis of the fixed costs actually foregone due to the implementation of the its DSM programs with its filing for CC rates that would become effective on May 1, 1995.

VI. ORDER

Accordingly, after due noti ce and consideration, it is

ORDERED: That the resource plan, as filed by Fitchburg Gas and Electric Light Company, be and hereby is approved; and it is

<u>FURTHER ORDERED</u>: That Fi tchburg Gas and Electric Light Company shall comply with all directives stated herein; and it is

FURTHER ORDERED: That the contract between Fi tchburg Gas and Electric Light Company and Conservation Services Group, Inc. be and hereby is approved subject to the condition stated herein; and it is

FURTHER ORDERED: That the contract between Fi tchburg Gas and Electric Light

The Company i ndi cated that i t prefers to establi sh the new CCs on May 1, 1994, and mai ntai n such CCs for twelve months, until May 1, 1995 (Tr. 1, at 107; Company Memorandum at 8)

Company and Energy Federati on, Inc. be and hereby is approved subject to the condition stated herein; and it is

FUNTHER ONDERED: That Fi tchburg Gas and Electric Light Company shall file revised conservation charges as directed by the Department herein.

By Order of the Department,

<u> [abl e 1</u>

<u>Summary of Supply-Si de RFP Ranki ng Cri teri a</u>

Selecti on Cri teri a	Maxi mum	Score
Value Criteria	75	
Pri ce		60
Operating & Quality Characteristics		15
Interrupti bi li ty and Di spatchabi li ty		5
Voltage Control		5
Mai ntenance Planni ng		5
Non- price Criteria	25	
Mai ntenance Planni ng Project Status		10
Unit Di versity		10
Other Resource planning Guidelines		5
Total Value and Non-price Criteria	100	

<u>Summary of Demand-Si de RFP Ranki ng Cri teri a</u>

Cri teri a Selecti on	Maxi mum	Score
Value Criteria	75	
Pri ce (total Resource Test)		60
Operating and Quality Characteristics		15
Savings Veri fication Plan Included		5
Comprehensi veness of Proposed Installa	ti ons	5
Quality of Savings Assumptions		5
Non- price Criteria	25	
Project Status and Feasi bilty		25
Financial Capabilities		4
Organi zati onal Support		4
ESCo Experi ence		4
Comprehensi veness of Servi ces		5
Warranty Provi si ons		2
ECM's		3
Implementati on Plan		3
Total Value and Non-price Criteria	100	

<u>Iable 3</u> <u>Projected Program Acti vi ti es</u>

PROGRAM	1994		1995			
	\$ (1)	MWH	KW	\$ (1)	MWH	KW
Residential Sp Heat	a C&B , 136	160	76	80,721	160	76
Resi denti al Li ghti ng Cata	60,760 og	203	77	67,272	362	138
Small C&l Li ghti ng	125,935	299	102	129,714	299	102
C&I Li ghti ng	174,935	800	215	181,441	800	215
Comprehensi ve Efficiency	129,080	734	232	132,952	734	232
TOTAL	578,846	2,196	702	592,100	2,355	763

NOTE 1 Amounts included in this table represent the Company's costs only; costs incurred by participants are not included.

<u>Iable 4</u> <u>Projected 1994 and 1995 CC Rates</u>

Rate Category	Projected 1994 CCs	Projected 1995 CCs
Resi denti al	\$0.00166	\$0.00160
Small General	\$0.00545	\$0.00613
Regular General	\$0.00377	\$0.00409
Large General	\$0.00279	\$0.00314